

that, assuming free space attenuation, the desired protection at the actual Grade B contour (64 dBμV/m for TV and 41 dBμV/m coverage contour for DTV stations) will be achieved. Directions for calculating powers, heights, and reduction curves are listed in §90.309 of this chapter for land mobile stations. Directions for calculating coverage contours are listed in §§73.683–685 of this chapter for TV stations and in §73.625 of this chapter for DTV stations.

(ii) Control, fixed, and mobile stations (including portables) that operate in the 776–777 MHz and 792–794 MHz bands and control and mobile stations (including portables) that operate in the 747–762 MHz and 777–792 MHz bands are limited in height and power and therefore shall afford protection to co-channel and adjacent channel TV/DTV stations in accordance with the values specified in Table D (co-channel frequencies based on 40 dB protection for TV stations and 17 dB for DTV stations) in §90.309 of this chapter and a minimum distance of 8 kilometers (5 miles) from all adjacent channel TV/DTV station hypothetical or equivalent Grade B contours (adjacent channel frequencies based on 0 dB protection for TV stations and –23 dB for DTV stations). Since control, fixed, and mobile stations may affect different TV/DTV stations than the associated base or fixed station, particular care must be taken by applicants/licensees to ensure that all appropriate TV/DTV stations are considered (e.g. a base station may be operating within TV Channel 62 and the mobiles within TV Channel 67, in which case TV Channels 61, 62, 63, 66, 67 and 68 must be protected). Control, fixed, and mobile stations shall keep a minimum distance of 96.5 kilometers (60 miles) from all adjacent channel TV/DTV stations. Since mobiles and portables are able to move and communicate with each other, licensees must determine the areas where the mobiles can and cannot roam in order to protect the TV/DTV stations.

(iii) In order to protect certain TV/DTV stations and to ensure protection from these stations which may have extremely large contours due to unusual height situations, an additional

distance factor must be used by all base, fixed, control, and mobile stations. For all co-channel and adjacent channel TV/DTV stations which have an HAAT between 350 and 600 meters, licensees must add the following DISTANCE FACTOR to the value obtained from the referenced Tables in §90.309 of this chapter and to the distance for control, fixed, and mobile stations on adjacent TV/DTV channels (96.5 km).

$\text{DISTANCE FACTOR} = (\text{TV/DTV HAAT} - 350) \div 14$ in kilometers, where HAAT is the TV or DTV station antenna height above average terrain obtained from its authorized or proposed facilities, whichever is greater.

(iv) For all co-channel and adjacent channel TV/DTV stations which have an antenna height above average terrain greater than 600 meters, licensees must add 18 kilometers as the DISTANCE FACTOR to the value obtained from the referenced Tables in §90.309 of this chapter and to the distance for control, fixed, and mobile stations on adjacent TV/DTV channels (96.5 km).

NOTE TO §27.60: The 88.5 km (55 mi) Grade B service contour (64 dBμV/m) is based on a hypothetical TV station operating at an effective radiated power of one megawatt, a transmitting antenna height above average terrain of 610 meters (2000 feet) and the Commission's R-6602 F(50,50) curves. See §73.699 of this chapter. Maximum facilities for TV stations operating in the UHF band are 5 megawatts effective radiated power at an antenna HAAT of 610 meters (2,000 feet). See §73.614 of this chapter. The equivalent contour for DTV stations is based on a 41 dBμV/m signal strength and the distance to the F(50,90) curve. See §73.625 of this chapter.

[65 FR 3148, Jan. 20, 2000, as amended at 65 FR 17605, Apr. 4, 2000; 65 FR 42883, July 12, 2000]

§§ 27.61–27.62 [Reserved]

§ 27.63 Disturbance of AM broadcast station antenna patterns.

WCS licensees that construct or modify towers in the immediate vicinity of AM broadcast stations are responsible for measures necessary to correct disturbance of the AM station antenna pattern which causes operation outside of the radiation parameters specified by the FCC for the AM station, if the disturbance occurred as a result of such construction or modification.